

Amendments to the Claims

1.(Currently Amended) A sample taking apparatus, arranged for receiving a plurality of samples from a separation gel support material (40), comprising a plurality of separation tools (10) for taking samples of the separation gel support material (40), wherein the separation tools (10) are arranged on a holding device (20), and are provided with respective actuating means (30), by which the separation tools (10) can be separately controlled and moved.

2.(Original) The sample taking apparatus according to claim 1, wherein the separation tools are tubular punching tools (11 to 18) which at one end thereof are axially movably arranged on the respective actuating means (31 to 38) and have, at the other end thereof, a punching edge.

3.(Original) The sample taking apparatus according to claim 2, wherein the punching tools (11 to 18) are formed as capillaries.

4.(Previously Amended) The sample taking apparatus according to claim 1, wherein the actuating means (30) are selected from the group consisting of pneumatic cylinders, hydraulic cylinders, piezoelectric actuating devices, and electromagnetic actuating devices.

5.(Previously Amended) The sample taking apparatus according to claim 1, wherein the separation tools (10) are arranged on the holding device (20) in a matrix having at least one row.

6.(Original) The sample taking apparatus according to claim 5, wherein the separation tools (10) are arranged such that their ends form an array which corresponds to the array of sample reservoirs in a predetermined microtiter plate format.

7.(Previously Amended) The sample taking apparatus according to claim 1, wherein each separation tool (10) is connected by a guide means (21) to the respective actuating means (30), wherein each guide means (21) has a connecting opening (21a) whereby the separation tool is connected to a pressure system.

8.(Previously Amended) The sample taking apparatus according to claim 1, wherein the holding device (20) is connected to an adjusting device (200) for positioning the holding device (20) with the separation tools (10) in a horizontal or x-y reference plane.

9.(Currently Amended) The sample taking device according to claim 8, further comprising an imager (300) and a control device (400), wherein the imager (300) supplies image data of a separation gel support material to the control device, which is arranged to generate target coordinates for controlling the adjusting device (200).

10.(Currently Amended) A method for cutting samples from a separation gel support material (40) and transferring said samples onto a target substrate (50), said method comprising:
cutting said samples from a separation gel successively in time using a sample taking apparatus (100) having a plurality of separation tools (10), that are separately controlled and moved; and transferring said samples onto said target substrate (50) simultaneously in parallel.

11.(Original) The method according to claim 10, wherein alternately first the sample taking apparatus (100) is moved by an adjusting device (200) into a position (P1, P2, ...) corresponding to predetermined target coordinates and then one or more separation tools (31 to 38) are actuated until all or some separation tools (31 to 38) are loaded with removed samples, whereupon the sample taking device (100) is moved to the target substrate (50) and the samples are transferred from the separation tools onto the target substrate (50).

12.(Currently Amended) The method according to claim 11, wherein the target coordinates of the positions (P1, P2, ..) are obtained from image data of the separation gel support material (40).

13.(Previously Amended) The method according claim 10, wherein the separation tools (30) are actuated by compressed air or a hydraulic liquid.

14.(Currently Amended) The method according to claim 10, wherein ~~the support material is a separation gel and the samples are substance bands (41, 42, 43) distributed in the separation gel, and the target substance substrate is a microtiter plate (50).~~

15.(Previously Amended) The method according to claim 10, further comprising the steps of applying an underpressure to the separation tools containing removed samples prior to the transfer; and

applying an overpressure to the separation tools containing removed samples to effect the transfer onto the target substrate.